

ABSTRACT OF THE DISCLOSURE

An apparatus for making a semiconductor assembly and, specifically, interconnecting a semiconductor die to a carrier substrate. The carrier substrate includes a first surface and a second surface with at least one opening therethrough. The die includes an active surface and a back surface, wherein the die is attached facedown to the first surface of the carrier substrate with conductive bumps therebetween. In addition, a plurality of bond wires is attached through the at least one opening in the carrier substrate between the active surface of the die and the second surface of the carrier substrate. With this arrangement, both the conductive bumps and the bond wires share in the electrical interconnection between the die and the carrier substrate, thereby allowing more space for bond pads to interconnect with bond wires and/or allowing for smaller die sizes.

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